

Claims

While the present invention has been described above in terms of specific embodiments, it is to be understood that the invention is not limited to the disclosed embodiments. On the contrary, the present invention is intended for various modifications and equivalent structures included within the spirit and scope of the appended claims.

I, the inventor claim:

1. A computer network method for paying for goods or services over the network using utility accounts with at least one utility service provider, a client terminal, a merchant server and a wireless communication device such as a mobile phone comprising steps for:

providing at least a centralized payment processor linked to the network;

extending at least one the utility service provider's main processor for establishing sub accounts for both payer and/or payee on the provider's main processor having a corresponding account identifier to the main utility account such as their customer number where such sub accounts include personal identification such as a password or a voice pattern of the payer and/or payee in order to gain access;

conducting a payment process initiated by the payer through the payee's point of sale such as a merchant server by validating the payer's mobile phone number or account identifier and the payee's account identifier;

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in the payment processor, upon receiving the account identifier of both payer and payee, responding with confirming the accounts with the respective utility service provider's main processor over the network;

- 10 in the payment processor, upon receiving a positive authentication response from the said utility service provider of the payer and payee, responding with the step of requesting for a password where the payer is prompted to key in the password using the keypad at the terminal or saying the password to the microphone so as to authenticate the payer's identity, authorisation and associating the accounts
- 15 linkage for both payer and payee to the payment transaction;

in the payment processor, upon receiving the password or voice pattern from the payer, this is authenticated with the stored password or voice pattern at the payer's utility service provider in order to gain access to the payer's sub account

20 over the network;

in the payer utility service provider's processor, upon authentication of the password or voice pattern will response as authenticated to the payment processor over the network;

- 5 if both authenticating steps are validated, where the payer's account is a prepaid account, the step includes a further step of verifying the availability of funds to affect the purchase and on confirmation from the payer's utility provider, the utility service provider will debit an amount of money equal to the payer's payment amount, subject to adjustment as instructed by payment processor over
- 10 the network;

- if both authenticating steps are validated, the payer's utility service provider will record a debit entry with an amount of money equal to the payer's payment amount in the monthly utility bill, subject to adjustment where the payer's account
- 15 is an non-prepaid utility account as instructed by the payment processor over the network;

- if both authenticating and debiting of the payer's account steps are validated, the payment processor will sent an approval code to the payee or merchant server and
- 20 instruct the merchant's utility service provider where the merchant's sub account is held to record a credit entry with an amount of money equal to the payer's payment amount on the merchant's monthly utility bill over the network, subject

to adjustment where such credit can be cashed out only when there is a net positive cash from the total bill on settlement;

at the payee or merchant's server, upon receiving this approval code, requested
5 goods or services will be deemed sold to the payer and will be released according to the terms of sale over the network;

at the completion of payment process, both payer and payee or merchant will receive an encrypted receipt detailing the purchase where the payer will receive
10 such receipt as a short text message into the mobile phone's memory storage or as in the form of an email and the merchant's server upon receiving this receipt message over the network will stored this into its database;

verification of purchase includes the step of downloading the said short text
15 message from the payer's mobile phone to the merchant's server using a wireless coupling device and the encrypted message is matched against the copy retrieved from the merchant's database;

and the integrity of the receipt includes the step of uploading the encrypted receipt
20 text message from the payer's mobile phone using the reply function or reply to the email message to the payment processor server over the network for decryption upon which the details of the transaction will be forwarded to the merchant originating the transaction.

2. A method according to claim 1 wherein the payment amount can be in the form of monetary units or utility units and exchangeable according to a preset formula.

3. A method according to claim 1 wherein the payment from the payer is made as
5 a direct debit transaction in the case of a prepaid utility account.

4. A method according to claim 1 wherein the payment is made from the payer as a debit book entry transaction in the case of a non prepaid utility account where the payment amount is included in the billing statement where the total bill
10 includes regular utility charges.

5. A method according to claim 1 wherein the payment is made to the merchant or payee as a credit book entry in the case of non prepaid utility account and is included in the billing statement where the total may be netted off with regular
15 utility charges.

6. A method according to claim 1 wherein the payment transaction is initiated at a point of sale by payer by connecting to the internet using internet protocol or wireless application protocol.

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7. A method according to claim 1 wherein the point-of-sale is connected to the network.

8. A method according to claim 1 wherein the payer's and payee's sub accounts are linked to their respective utility service accounts at their utility service providers' processors.

5 9. A method according to claim 1 wherein the payer's account and payee or merchant's accounts is a prepaid utility service account linked to their sub account.

10 10. A method according to claim 1 wherein said communicating data indicative of the payment transaction, payer's password, payee's account and payer's account from the point-of-sale to the payment processor includes communicating the data from the point-of-sale over a network to the payment processor.

15 11. A method according to claim 10 wherein said communicating step further comprising communicating a request for authenticating data to be responded by payer either by voice or by keying into the payer's mobile device or terminal keyboard sent over a network to the payment processor over the network.

20 12. A method according to claim 11 where authentication data is a password or voice pattern of the user stored in the sub account linked to the utility account with the payer's utility provider as required to authorise the transaction.

13. A method according to claim 10 where upon receiving the successful
 authorisation from the payer's utility company processor, the communicating
 steps include payment processor sending instructions to utility company's
 processor for payee to credit the payee's utility sub account and instructions to
 5 utility company's processor for payer to debit the payer's utility sub account and
 sending encrypted text receipts to payer's mobile devices or terminal and payee's
 server over the network as confirmation.

14. A method according to claim 1 wherein said communicating data indicative
 10 of the payment request from the payer to the centralized payment processor and
 utility service provider main processor:

communicating a request to verify the authentication code or identification linked
 with the sub account to the payer's utility service provider's main processor;

15 receiving a response from the payer's utility service provider main processor;

communicating a request for authentication data from payer;

20 communicating a request to verify the authentication data linked with the sub
 account to the payer's utility service provider's main processor;

receiving a response from the payer's utility service provider main processor;

communicating the credit instruction to payee's utility service provider's main processor;

- 5 communicating the debit instruction to payer's utility service provider's main processor;

communicating a text message receipt to payee's server;

- 10 communicating a text message receipt to payer's mobile device or terminal by email;

providing a network access point for the payment processor; and

- 15 routing the transaction message via the network access point to the payment processor.

15. A method according to claim 1 further comprising settlement of the payment transaction by receiving confirmation of debiting an amount equal to the payment
20 amount in payer's sub account, subject to adjustment, from the payer's utility service provider and a confirmation of crediting the said amount subject to adjustment, into the payee's utility account by book entry from payee's utility

service provider, thereby decreasing the amount by the payer's account and increasing the amount to payee's account.

- 5 16. A method according to claim 1 including, in the payment processor, maintaining a database of payers' utility accounts and a list of utility accounts for participating payees with links to each transaction, an unique identifier for the purposes of reconciliation and profiling of users.

- 10 17. A method according to claim 1 and further comprising a customer interface comprising an interactive voice response module.

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